What is claimed is:

1. A method of simulation, wherein variations in an electrical characteristic of a device constituting a semiconductor integrated circuit are represented in the form of a
5    corner model including at least one corner defining a limit of the variations, said method comprising the steps of:

(a) preparing a predetermined value tolerable for the variations in said electrical characteristic at said at least one corner;

(b) performing a circuit simulation to determine a device parameter sensitivity
10    which is the derivative of said electrical characteristic with respect to a device parameter indicative of information about said device; and

(c) applying said device parameter sensitivity and said predetermined value of said electrical characteristic to the normal equation of the least squares method to determine variations in said device parameter at said at least one corner.

15

2. The method according to claim 1,

wherein said device parameter includes at least one of a model parameter regarding the shape of said device and a process parameter regarding a condition during the steps of manufacturing said semiconductor integrated circuit.

20

3. The method according to claim 1, further comprising the step of

(d) calculating the variations in said electrical characteristic at said at least one corner, based on the multiplication of said device parameter sensitivity provided in said step (b) and the variations in said device parameter at said at least one corner provided in
25    said step (c).

4. The method according to claim 3,

wherein a comparison is made between the variations in said electrical characteristic at said at least one corner calculated in said step (d) and said predetermined

5   value prepared in said step (a), and, if an error of said electrical characteristic is greater than another predetermined value, said steps (b) through (d) are executed again.

5. The method according to claim 3,

wherein a comparison is made between the variations in said electrical

10   characteristic at said at least one corner calculated in said step (d) and said predetermined value prepared in said step (a), and, if an error of said electrical characteristic is greater than another predetermined value, a new device parameter is introduced to execute said steps (b) through (d) using said new device parameter and said device parameter in combination.

15

6. The method according to claim 1,

wherein said device parameter includes a plurality of device parameters, and

wherein said step (c) is not executed upon at least one of said device parameters, but is executed upon only the remainder of said device parameters.

20

7. The method according to claim 1,

wherein said variations in said device parameter are determined using the weighted least squares method in said step (c).

25      8. A device for simulation, said device using a method of simulation as recited

in claim 1 to represent the variations in said electrical characteristic of said device in the form of said corner model, said device comprising:

data input means for inputting said predetermined value tolerable for the variations in said electrical characteristic;

5 data output means;

a simulator for simulating the amount of change in said electrical characteristic as would occur when said device parameter is changed, to determine said device parameter sensitivity; and

data processing means for applying said device parameter sensitivity 10 determined by said simulator and said predetermined value of said electrical characteristic inputted to said data input means to the normal equation of the least squares method, to determine variations in said device parameter at said at least one corner, thereby outputting the variations in said device parameter at said at least one corner to said data output means.

15

9. The device according to claim 8, further comprising

a data storage section for storing therein data about said device parameter sensitivity and data about the variations in said device parameter.